

CTV-Elk Hills Oil Field Class VI A1-A2 Project Review of Financial Responsibility Information

EPA reviewed the financial responsibility demonstration, including cost estimates and information about draft financial instruments, provided in the August 2021 Class VI permit application for the proposed Carbon TerraVault1 (CTV) Class VI geologic sequestration project.

Pursuant to 40 CFR 146.85, Class VI permit applicants must demonstrate financial responsibility for: performing corrective action on deficient wells in the area of review (AoR), plugging injection wells, post-injection site care (PISC) and site closure, and emergency and remedial response. To make this demonstration, they must estimate the cost of each of these activities and provide qualifying financial instruments.

Cost Estimates

It appears that CTV used EPA's Cost Estimation Tool for Class VI Financial Responsibility to develop their cost estimates. EPA's guidance recommends that the financial responsibility cost estimates in a Class VI permit application be based on a third-party cost estimate of the activities an applicant plans to perform. These project-specific estimates of the covered costs are necessary to ensure that sufficient resources are available to cover the costs of EPA engaging a third party to complete the activities, should an operator become financially insolvent.

Therefore, EPA requests that CTV provide an independent estimate of the costs of the activities described in the project plans for which financial responsibility is required, specifically:

- Plugging injection wells 357-7R and 355-7R. Separate estimates specific to each well are requested.
- Post-injection site care that includes all post-injection groundwater quality monitoring and plume and pressure front tracking activities described in the PISC and Site Closure Plan.
- Site closure that includes the cost of plugging all the monitoring wells at the site (including the Etchegoin, Tulare, and Monterey Formation monitoring wells).
 - EPA also requests that CTV elaborate on the ownership and planned future use of the EOR wells to be used for monitoring in the Monterey A3-11 Sands, as described on page 12 of the Testing and Monitoring Plan. (Financial assurance for plugging these wells may be needed.)
- Emergency and remedial response that describes all the response activities under the various emergency scenarios described in the Emergency and Remedial Response Plan.

Based on the information currently available in the AoR and Corrective Action Plan, it does not appear that any corrective action is needed. However, if, based on additional evaluation, a larger AoR is determined to be needed or there are any deficient wells in the AoR, the cost estimate would need to account for corrective action on these wells. The outcomes of other aspects of the permit application review may affect cost estimates for other activities.

Financial Instrument Demonstration

CTV plans to provide financial assurance for injection well plugging and PISC and site closure by posting a letter of credit (LOC) that will be backed by its Credit Agreement with Citibank, N.A. CTV will provide financial assurance for emergency and remedial response via an environmental insurance policy.

Limited information was provided with the permit application, and it is anticipated that CTV will provide additional information and draft financial instruments as the time for issuance of any Class VI permits for the facility nears. EPA recommends that CTV consult the *UIC Program Class VI Financial Responsibility Guidance* as it develops the instruments, including:

- The recommended specifications for a letter of credit (beginning on page 31) and insurance (on page 32), and
- The recommended financial instrument language provided in Appendix B of the Guidance (on page B-2 for a LOC and page B-17 for a certificate of insurance).

In addition, regarding the Letter of Credit, EPA requests that CTV clarify whether other liabilities are covered using the same line of credit and, if so, how the funds specified for Class VI financial responsibility under the LOC will be protected from other liabilities.